

**Matrosov Yu.A.**

***Energy Conservation in Buildings. Problem and the Ways of Her Solution. –M., NIISF, 2008, 570 p., 255 ill., by Russian.***

### **Summary**

The book describes the results of more than 10 years' research and development of the Russian Building Physics Research Institute, CENEf and other organizations in energy efficiency in buildings. This R&D was accomplished under the author's guidance. The book explores the problems related to energy efficiency improvements in buildings, international energy efficiency experience, energy efficiency policies in the Russian construction sector and how building energy savings can be achieved through improvements.

The book elaborates on the retrospective analysis of standards for building thermal performance in Russia; describes new systematic approaches to energy efficiency standards and thermal performance of buildings, rationalization and implementation of these standards in the codes and regulations both at the federal and regional levels in Russia and the CIS states.

The author underlines the value of the systematic energy approach to the building thermal performance standards based on specific energy consumption for heating and ventilation; energy efficiency classification of buildings; building energy passports as a way of controlling the design quality and building management; incentives for the application of efficient building technologies; systematic popularization of the new approaches; and targeted training. The book describes methods for monitoring energy consumption and air permeability, as well as for energy certification of buildings. It also provides energy efficiency standards for high-rise buildings and elaborates on issues related to the standards implementation, barriers and solutions.

The author analyzes building energy efficiency standards in Russia as compared to those elsewhere in the world and describes the European technical regulation experience with a focus on the construction energy efficiency improvements.

The book is meant for designers, researchers and engineers, design and research companies, post-graduate students, as well as for teachers and students of building universities.

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